

**REMARKS**

This Amendment and Response to Non-Final Office Action is being submitted in response to the non-final Office Action mailed August 16, 2005. Claims 1-26 and 28-53 are pending in the Application. Claims 1-26 and 28-53 stand rejected. Specifically, Claims 1, 2, 10-15, 17, 18, 22, 26, 28, 29, 35-44, and 51-53 stand rejected under 35 U.S.C. 102(e) as being anticipated by Ramakrishnan (PGPub 2003/0012196). Claims 3-7, 16, 19-21, 23-25, and 30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196). Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196) in view of Bavant et al. (U.S. Pat. No.6,529,473). Claims 31-34 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196) in view of Baidon et al. (U.S. Pat. No.5,699,348). Finally, Claims 45-50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196) in view of Bussiere (U.S. Pat. No. 6,041,042).

In response to these rejections, Applicants offer the following amendments and remarks. These are fully supported in the specification, drawings, and claims of the Application and no new matter has been added. Based upon the following amendments and remarks, reconsideration of the Application and withdrawal of the rejections are respectfully requested.

***Rejection of Claims 1, 2, 10-15, 17, 18, 22, 26, 28, , 29, 35-44, and 51-53  
Under 35 U.S.C. 102(e) – Ramakrishnan ‘196:***

Claims 1, 2, 10-15, 17, 18, 22, 26, 28, 29, 35-44, and 51-53 stand rejected under 35 U.S.C. 102(e) as being anticipated by Ramakrishnan (PGPub 2003/0012196). The Examiner recites a litany of features disclosed by Ramakrishnan ‘196 and concludes that it anticipates the claims of the present Application.

The Examiner has stated that Ramakrishnan '196 discloses "additional output ports ... are available for connecting one or more promiscuous monitors." Further, the Examiner states that Ramakrishnan '196 discloses that these output ports can be configured as either a working port or as a test port.<sup>1</sup>

The Applicants have amended independent Claims 1, 26, 31, 35, 45, 51, and 52. As amended, these claims now require that "the cross-connection subsystem programs said at least one test port while the network device is operating to function as a working port for normal data transfer while maintaining uninterrupted service provided by said network device." The Examiner admits in numbered paragraph 60 that Ramakrishnan does not expressly disclose that the ports are capable of being programmed as a test port or a working port while the network device is operating.<sup>2</sup> In light of the amendments to the independent claims and the Examiner's admission, the Applicants respectfully submit that this rejection has been traversed. Applicants respectfully request the immediate withdrawal of the rejection.

***Rejection of Claims 3-7, 16, 19-21, 23-25, and 30  
Under 35 U.S.C. 103(a) – Ramakrishnan '196:***

Claims 3-7, 16, 19-21, 23-25, and 30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196). The Examiner admits that Ramakrishnan '196 does not disclose that various subsystems are implemented using cards, specifically a cross-connection card, a port card, and a forwarding card. However, The Examiner takes official notice that implementing a system using cards is well known in the art since cards provide the hardware necessary to implement a component.<sup>3</sup> The Examiner takes similar official notice of limitations in Claims 3, 16, 19, 20, 21, 23, 25, and 30.

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<sup>1</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 4, quoting PGPub 2003/0012196, paragraph 27.

<sup>2</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 60.

<sup>3</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 38.

As stated above, Applicants have amended independent Claims 1, 26, 31, 35, 45, 51, and 52. As amended, these claims now require that “the cross-connection subsystem programs said at least one test port while the network device is operating to function as a working port for normal data transfer while maintaining uninterrupted service provided by said network device.” Support for this amendment can be found in Claim 45, and at page 3, paragraph 3 of the Application as filed. The Examiner admits in numbered paragraph 60 that Ramakrishnan does not expressly disclose that the ports are capable of being programmed as a test port or a working port while the network device is operating.<sup>4</sup> In light of the amendments to the independent claims and The Examiner’s admission, the Applicants respectfully submit that this rejection has been traversed. Applicants respectfully request the immediate withdrawal of the rejection.

While Applicants may believe that the Examiner’s judicious use of official notice would likely run afoul of the obviousness requirements as set out in *Graham v. John Deere*, such point is moot in light of the amended claims.

***Rejection of Claims 8 and 9 Under 35 U.S.C. 103(a) –  
Ramakrishnan ‘196 in view of Bavant et al. ‘473:***

Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196) in view of Bavant et al. (U.S. Pat. No.6,529,473). The Examiner admits that Ramakrishnan ‘196 does not disclose that the cross-connection subsystems comprises a first cross-connection card and a second cross-connection card, wherein the physical layer subsystem comprises a first port card connected to the first cross-connection card and a second port card connected to the second cross-connection card, and wherein the upper layer subsystem comprises a first forwarding card connected to the first cross-connection card, and a second forwarding card connected to the second cross-connection card. The Examiner instead relies on Bavant et al. to disclose these deficiencies.

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<sup>4</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 60.

The Applicants have amended claim 1 from which Claims 8 and 9 depend. As amended, this claims now requires that “the cross-connection subsystem is programs said at least one test port while the network device is operating to function as a working port for normal data transfer while maintaining uninterrupted service provided by said network device.” Support for this amendment can be found in Claim 45, and at page 3, paragraph 3 of the Application as filed. The Examiner admits in numbered paragraph 60 that Ramakrishnan does not expressly disclose that the ports are capable of being programmed as a test port or a working port while the network device is operating.<sup>5</sup> Further, Bavant et al. ‘473 does not disclose these additional limitations. In light of the amendments to the independent claims and The Examiner’s admission, the Applicants respectfully submit that this rejection has been traversed. Applicants respectfully request the immediate withdrawal of the rejection.

***Rejection of Claims 31-34 Under 35 U.S.C. 103(a) –  
Ramakrishnan ‘196 in view of Baidon et al. ‘348:***

Claims 31-34 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196) in view of Baidon et al. (U.S. Pat. No.5,699,348). While the Examiner admits that Ramakrishnan ‘196 does not disclose that the test port is capable of transmitting test data from said test equipment to said any of said physical layer subsystem and said cross-connection subsystem, the Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to enable the test port to transmit test data from said test equipment to said any of said physical layer subsystem and said cross-connection subsystem in order to allow the network equipment to transmit test data to a central management system.<sup>6</sup>

The Applicants have amended Claim 31 from which Claims 32-34 depend. As amended, this claim now requires that “the cross-connection subsystem programs said at least one test port while the network device is operating to function as a working port for normal data transfer while maintaining uninterrupted service provided by said network

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<sup>5</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 60.

<sup>6</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 55.

device.” Support for this amendment can be found in Claim 45, and at page 3, paragraph 3 of the Application as filed. The Examiner admits in numbered paragraph 60 that Ramakrishnan does not expressly disclose that the ports are capable of being programmed as a test port or a working port while the network device is operating.<sup>7</sup> Further, Baidon et al. ‘348 does not disclose these additional limitations. In light of the amendments to the independent claims and The Examiner’s admission, the Applicants respectfully submit that this rejection has been traversed. Applicants respectfully request the immediate withdrawal of the rejection.

***Rejection of Claims 45-50 Under 35 U.S.C. 103(a) –  
Ramakrishnan ‘196 in view of Bussiere et al. ‘042:***

Claims 45-50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ramakrishnan (PGPub 2003/0012196) in view of Bussiere (U.S. Pat. No. 6,041,042). While The Examiner admits in numbered paragraph 60 that Ramakrishnan does not expressly disclose that the ports are capable of being programmed as a test port or a working port while the network device is operating<sup>8</sup>, he concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the ports be capable of being programmed as a test port or a working port while the network device is operating in order to avoid having a physical port dedicated to monitoring.

Applicants have amended independent Claims 1, 26, 31, 35, 45, 51, and 52. As amended, these claims now require that the “cross-connection subsystem transfers network data between the physical layer working port and the upper layer subsystem and multicasts a portion of the network data to the physical layer test port wherein said network data remains unprocessed and untranslated by said upper layer subsystem ....” Support for this amendment can be found in Claim 2, and at page 3, paragraph 3 of the Application as filed.

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<sup>7</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 60.

<sup>8</sup> See US Pat App No 09/616,477, Office Action 8/17/2005, numbered paragraph 60.

Bussiere '042 states that original packets encapsulated using encapsulation logic by prepending the packet with a header which provides a new destination/source address pair directing the packet through the connection path. The prepended header portion includes the MAC address of the analyzer, the MAC address of the port to be mirrored, and the IEEE defined ethertype field, which contains information regarding the type of packet. Upon reaching the egress device, the modified packet is processed by de-encapsulation logic, where the prepended header is removed.<sup>9</sup>

It is this type of upper\_layer processing that the present invention avoids. As stated in the Application as filed:

As the data received is modified, it becomes more difficult to pin point the source of the problem. A comparison of data sent to data received at the test port may show differences but it will be difficult to determine if the data received by the device was corrupted before or after receipt.

Thus, Bussiere '042 is descriptive of precisely one of the problems that Applicants have overcome in the current invention. As stated in each of the amended claims, data has minimal modification and no translation or processing by the upper layer subsystem. Bussiere '042 does not teach the limitation as recited in the amended claim.

In light of the amendments to the independent claims, the Applicants respectfully submit that this rejection has been traversed. Applicants respectfully request the immediate withdrawal of the rejection.

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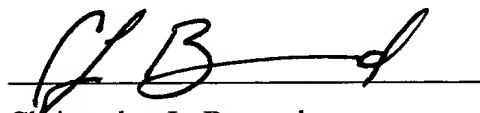
<sup>9</sup> US Pat No 6041042, column 7, line 50 through column 8, line 8.

**CONCLUSION**

Applicants would like to thank the Examiner for the attention and consideration accorded the present Application. Should the Examiner determine that any further action is necessary to place the Application in condition for allowance, the Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, the Examiner is encouraged to notify undersigned Counsel at the Examiner's earliest convenience.

Respectfully submitted,

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